

Claims

1. Light-emitting displays with variable switching voltages and brightness control, characterized in that one or more light-emitting chips with in each case one and/or one integrated constant current generator and/or voltage-dependent multivibrator and/or other circuit arrangements which guarantee current constancy and/or pulsed control are integrated in a common housing to form a structural unit.
2. Light-emitting displays according to claim 1, characterized in that the integrated circuit arrangements have dynamic and/or static brightness control.
3. Light-emitting displays according to claim 1, characterized in that the integrated circuit arrangements are made in the same material as the light-emitting chips.
4. Light-emitting displays according to claim 1, characterized in that the integrated circuit arrangements are mounted on the same support materials as the light-emitting chips.
5. Light-emitting displays according to claim 1, characterized in that a brightness control, control of the level of the constant current and of the light colour is provided and the corresponding generators are integrated.
6. Light-emitting displays according to claim 1, characterized in that the light-emitting chips are arranged on mesa bumps or cavities.

LIGHT-EMITTING DISPLAYS WITH VARIABLE SWITCHING VOLTAGES AND BRIGHTNESS CONTROL

The invention relates to light-emitting displays with variable switching voltages and brightness control, which offer more display and signalling possibilities in devices and systems. The aim of the invention is to expand the applicable operating voltage of light-emitting displays from 2 V to 50 V without additional external wiring by means of an integrated circuit arrangement. According to the invention, this object is achieved in that one or more light-emitting chips with in each case one and/or one integrated constant current generator and/or voltage-dependent multivibrator and/or other circuit arrangements which guarantee current constancy and/or pulsed control are integrated in a common housing to form a structural unit. The displays according to the invention may be used without external wiring in communication engineering, in the automotive industry, in mechanical engineering, in the appliance industry, in the mining industry and in metrology.